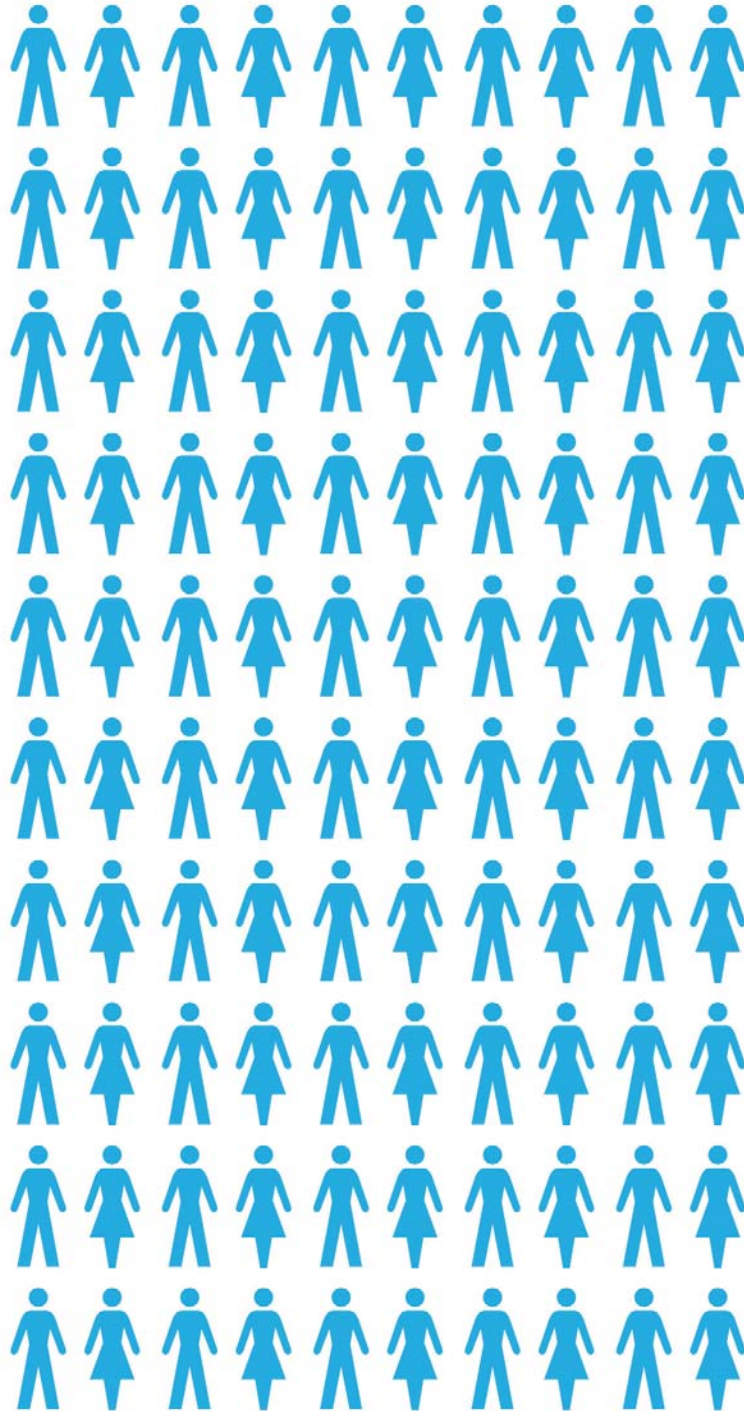


Everyone, everywhere

A vision for water, sanitation and hygiene post-2015



#everyone2030

 **WaterAid**

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WaterAid works to transform lives in the following 27 countries in Africa, Asia, the Pacific region and Central America: Angola, Bangladesh, Burkina Faso, Ethiopia, Ghana, India, Kenya, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Sierra Leone, Swaziland, Tanzania, Timor-Leste, Uganda and Zambia.

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A child washes their hands, St Joseph's School, Chinnavilai village, Kanyakumari district, Tamil Nadu, India



Foreword

"Universal access to water, sanitation and hygiene: a post-2015 development priority"

The Millennium Development Goals have become a shared framework for the world to talk about international development. Our deadline for achieving this visionary set of goals will however expire in less than three years and although tremendous progress has been made, significant challenges remain. Take access to the most basic, effective forms of sanitation. Based on current trends, 2.4 billion people worldwide will still lack access to basic sanitation facilities by 2015, making sanitation the worst performing sector of all the MDG's.

The international community is now discussing what might come next, after 2015. Along with my distinguished colleagues Prime Minister David Cameron of the United Kingdom, and President Susilo Bambang Yudhoyono of Indonesia, I have the honor of co-chairing the UN Secretary-General's High-level Panel on the Post 2015 Development Agenda. Our job, and the job of our fellow panelists, is to develop a bold, yet practical vision for development for the Secretary-General and UN Member States to consider.

Addressing the global water and sanitation crisis is not about charity, but opportunity. According to the World Health Organisation, every \$1 invested in water and sanitation produces an average of \$4 in increased productivity. It enables sustainable and equitable economic growth.

This report presents a strong and compelling case for making safe water and effective sanitation available to all. It effectively illustrates how improved WASH is essential to the health, welfare and productivity of the global population. In short, it will not be possible to make progress in eradicating poverty, reducing inequality and securing sustainable economic development in future without improving access.

There are many challenges facing the world today, and some are particularly difficult to address because we simply do not yet know how to tackle them. This cannot be said of water and sanitation. We know how to provide them, we have the resources, we simply need to decide whether doing so is a priority.

Sincerely,



Ellen Johnson Sirleaf

Executive summary

In 2000, the international community set out a vision for development through to 2015 – the Millennium Development Goals (MDGs). This vision included halving the proportion of people without sustainable access to safe drinking water and sanitation. Globally, the target for water has been met, but the sanitation target has not, and several regions of the world are seriously off-track for both. The best estimates available show that at least 783 million people still lack clean water, while the true number may be far higher. Taking population growth into account, there are almost as many people without access to sanitation worldwide as there were 20 years ago. The poorest and most marginalised people have seen least progress and continue to suffer the greatest burden in terms of child deaths and diseases associated with inadequate water, sanitation and hygiene (WASH).

History shows that the health, welfare and productivity of developing country populations are closely linked with improvements in water, sanitation and hygiene. Furthermore, there is strong evidence to suggest that slow progress in Sub-Saharan Africa and Asia, which remain off-track for meeting the MDG water and sanitation targets, is acting as a brake on progress towards related human development goals, particularly nutrition and child health. Few interventions would have a greater impact on the lives of the world's poorest and most marginalised people, particularly women and girls, than reducing the time spent collecting water and addressing the health problems caused by poor sanitation and hygiene. We therefore urgently need to get back on-track and identify ways of accelerating future rates of progress.

Charlie Bibby/Financial Times



Girl washing dishes at the shore of polluted Lake Gulshan, Korail slum, Dhaka, Bangladesh

It is important to recognise that the context for development has changed since 2000. Issues such as climate change and urbanisation present growing risks and challenges. Natural resources are under growing pressure. Access to drinking water is now recognised as a basic human right, but water is also increasingly perceived as both a scarce and valuable economic commodity and a major source of risk. Safe management of human waste is a rapidly growing problem that poses serious risks to both human and environmental health. Meanwhile, the global distribution of power and wealth is shifting, and new opportunities are emerging to draw on a broader range of knowledge and expertise, creativity and innovation, and finance – public, private and civil society, from a much wider range of countries.

Against this backdrop, the international community is in the process of developing a new framework to guide development efforts beyond 2015. WaterAid believes that poverty eradication and human development should be the overarching aim of any future goal framework, and that priority should be given to human development outcomes that are universally recognised as being important – including universal access to water, sanitation and hygiene. It should seek to improve on the MDGs by better reflecting the integrated nature of factors affecting development and creating incentives for coordinated action across sectors. It should also have a more explicit focus on reducing inequalities by targeting poor and marginalised groups and neglected or lagging areas of development, such as sanitation.

WaterAid was established over 30 years ago with a simple vision of a world where everyone has access to safe drinking water, sanitation and hygiene. As the MDG era draws to a close and we look ahead to post-2015, there is a growing consensus among sector professionals that, for the first time in history, this longstanding goal of universal access is now within reach. It will not be easy, but with sufficient political commitment, innovative partnerships and integrated approaches, underpinned by sound financial investment, it could be achieved by 2030.

International leaders must be bold and set an ambitious timeline for achieving universal

access to water, sanitation and hygiene. We cannot eradicate poverty without doing so, as improvements in these areas are of central importance to development outcomes in health, education, gender equality, growth and employment, and environmental sustainability.

The political and technical processes through which the framework is developed are key to building consensus around a common vision, and should include strong representation from developing country governments and civil society organisations. It is vital that special efforts are made to take account of the voices of poor and marginalised groups around the world.

Whatever shape the emerging framework takes, the integrated nature of factors affecting human and economic development must be recognised. Specifically, the contribution of safe drinking water, sanitation and hygiene to other areas of poverty reduction, including health, education, gender equality, growth and employment, and environmental sustainability should be reflected. The new framework should also seek to minimise water-related risks, and build the resilience of societies and economies by protecting them from shocks and the added pressures of climate change. Finally, concrete mechanisms need to be established to mobilise the resources required to deliver goals, create incentives for coordinated action across sectors, and strengthen accountability for results.

In summary, WaterAid recommends that the post-2015 framework should:

- Include a goal on universal access to basic water and sanitation services as a fundamental human right.
- Specify a target date of 2030 for achieving universal access to safe water, sanitation and hygiene globally.
- Ensure that water, sanitation and hygiene targets and indicators focus explicitly on reducing inequalities, by targeting poor and disadvantaged people as a priority, and on improving the sustainability of services to secure lasting benefits.

Introduction

In 2000, the United Nations (UN) General Assembly adopted the Millennium Declaration, which set out its vision for development. This declaration evolved into eight goals – the Millennium Development Goals (MDGs)¹. The MDGs, and the targets and indicators used to measure progress towards them, focus on development outcomes that are achievable by 2015 and contribute to the eradication of extreme poverty.

As we approach 2015, the international community is assessing the progress made towards each of the MDGs, and the overall objective of poverty eradication. This includes measuring the progress made towards halving the number of people without sustainable access to safe drinking water and basic sanitation, and looking at why there has been relatively little progress on sanitation.

Decision-makers around the world are reviewing the strengths and weaknesses of the MDG framework. For water, sanitation and hygiene (WASH), this includes considering the adequacy of the existing goals, targets and indicators, with

particular focus on hygiene, access to services beyond the household, and issues of equity and sustainability. They are also assessing how failure to deliver water and sanitation has had an impact on progress towards the other MDG targets.

Against this backdrop, it is helpful to re-examine why improving access to water, sanitation and hygiene matters – both as a fundamental human right, and because of the relationship with a broad range of human, economic and environmental development outcomes.

This report explores the ways in which access to water, sanitation and hygiene affects development outcomes, including health, education, gender equality, growth and employment, and environmental sustainability. It highlights the need for any post-2015 framework for development to reflect this inter-relationship and encourage collaboration across sectors, and to set ambitious targets for the achievement of universal access to water, sanitation and hygiene as a human right.

WaterAid/GMB Akash/Panos

A photograph of a woman, Banna Bouri, wearing an orange sari, smiling as she collects water from a tubewell. She is holding a large metal pot. The background shows a rural setting with trees and a bamboo fence.

Banna Bouri, 35, vice-president of the local water, sanitation and hygiene committee for the Lakatoorah tea garden, collecting clean water from the new tubewell, Sylhet, Bangladesh

Improving access to water, sanitation and hygiene

Global progress to date

The MDG framework, under the environmental sustainability goal, included a target 'to halve the proportion of people without sustainable access to safe drinking water and sanitation' between 1990 and 2015. Current estimates indicate that the target for access to safe drinking water has already been met globally, with more than two billion people having gained access to improved drinking water sources since 1990².

This milestone demonstrates the power of setting development goals and targets that are ambitious but also achievable. However, one in ten of the world's population – 783 million people – still do not use an 'improved' drinking water source³. We know that many of those who have gained access, particularly women and girls, still spend many hours each day collecting water. The indicators currently used do not measure distance, water quality or the sustainability of drinking water services. Estimates of the extent of these parameters are imprecise, but it's likely that the true figure for those who do not have access to a safe, sustainable water supply service is well over one billion⁴.

The sanitation target is the most off-track of all the MDG targets⁵, with over 2.5 billion people without access to basic sanitation⁶. Taking population growth into account, this means there are almost as many people without basic sanitation today as there were in 1990⁷. If present trends continue, the MDG target to halve the proportion of people living without basic sanitation services will not be met until 2049⁸. According to the World Health Organisation, the world will need to have spent \$32.2 billion each year between 2010 and 2015 to meet the MDG targets on water and sanitation by 2015⁹.

Data on global trends masks significant disparities between regions. For example, as Figures 1 and 2 show, Sub-Saharan Africa lags behind other regions on both water and sanitation, with only 19 countries on-track to meet the MDG water target¹⁰. In part, this is due to low investment by national governments and donors, as well as by the private sector, with the funding to meet the target nowhere near what is required¹¹. Performance in the sector is also affected by the low capacity of national and local agencies, many of which suffer from weak leadership and planning capability, staffing and skills gaps, and poorly allocated budgets¹².

Fig 1 – Progress towards the MDG drinking water target, 2010

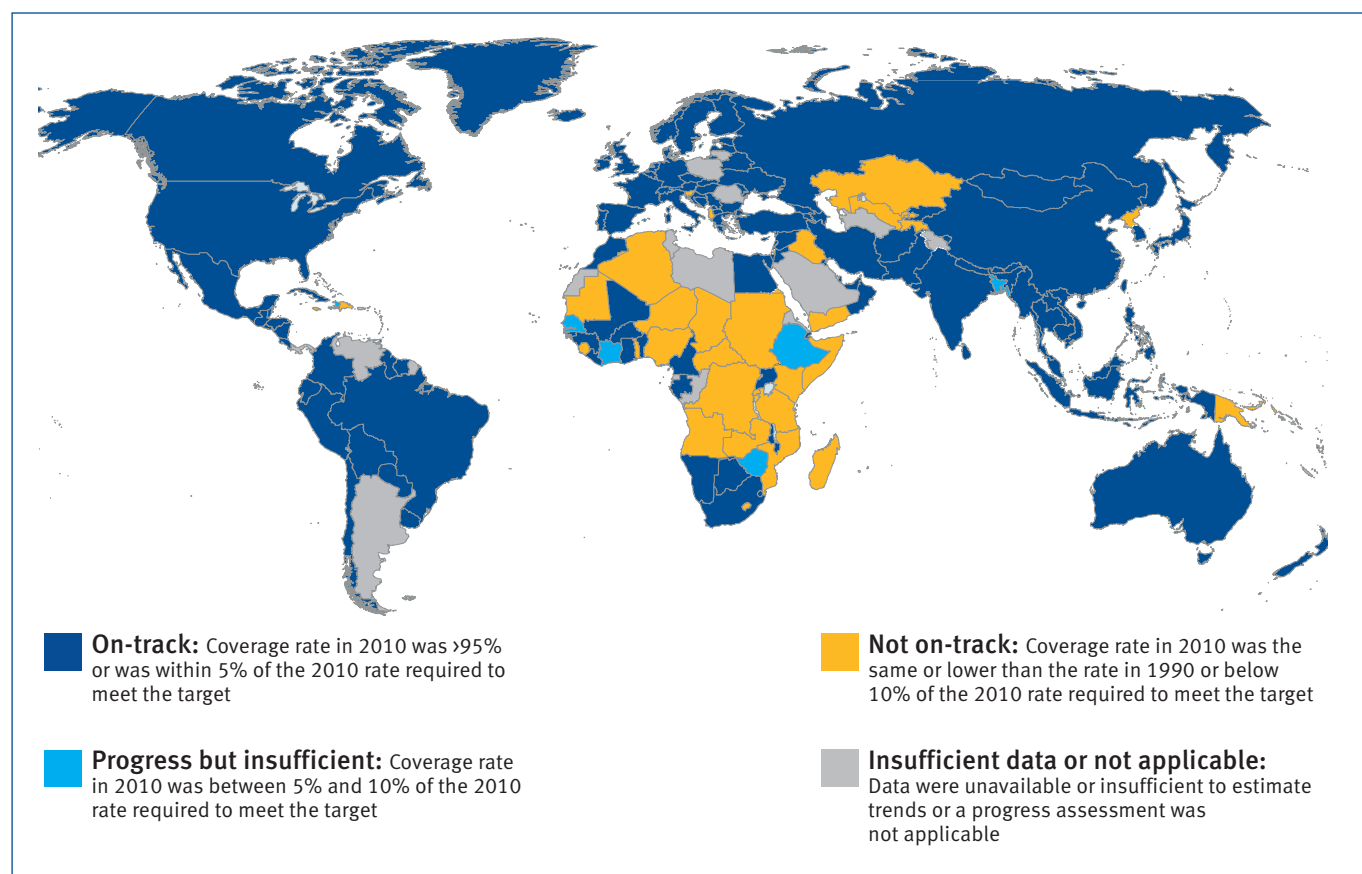
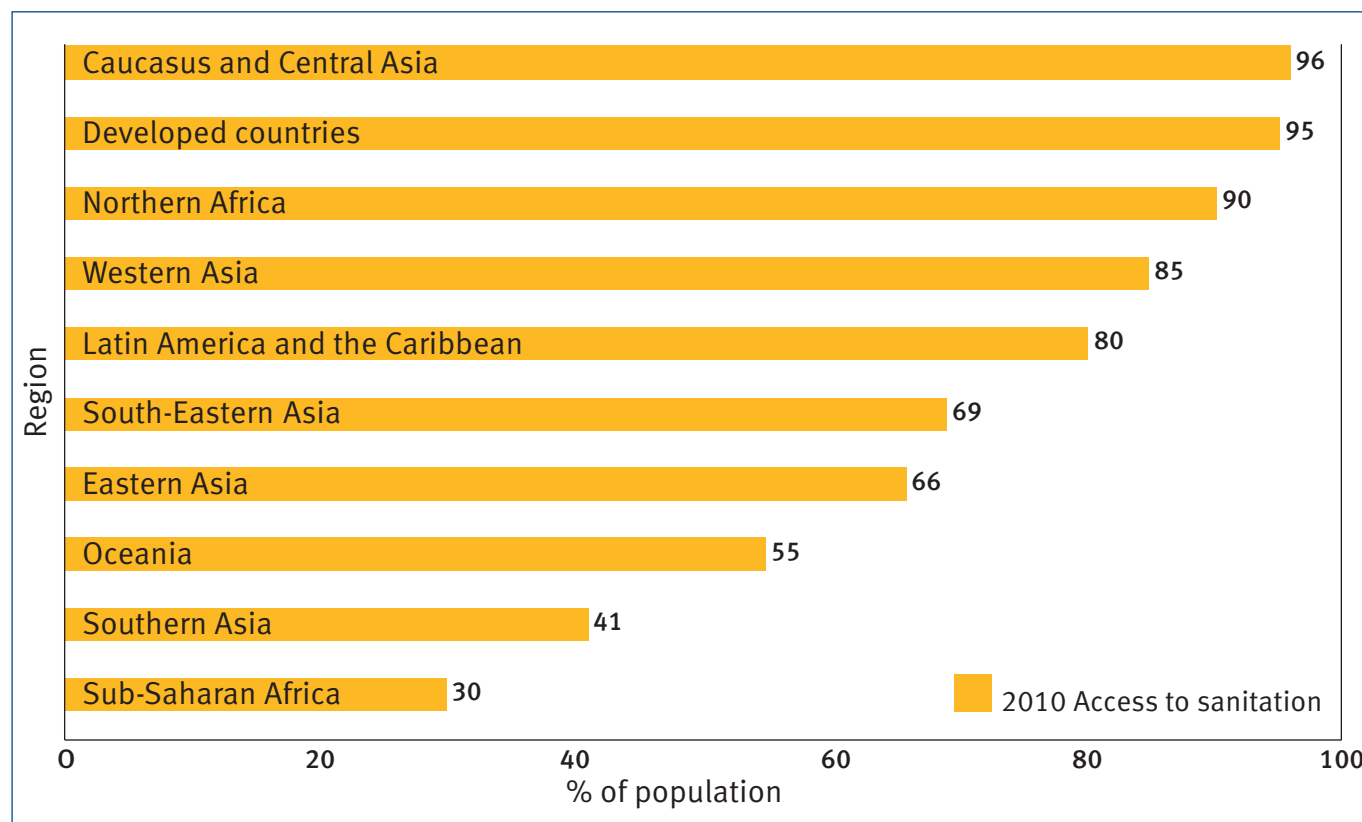


Fig 2 – Regional access to sanitation in 2010



Source (Figs 1 and 2): JMP 2012

The MDG framework did not include a target or indicators relating to hygiene, despite hygiene promotion being recognised by the World Bank as the most cost effective health intervention¹³. As a result, opportunities have been missed to improve individual and household hygiene behaviour, such as handwashing with soap and menstrual hygiene management. Furthermore, the MDG water and sanitation targets focused only on households, neglecting access in other critically important settings, such as workplaces, schools and hospitals. This represents a missed opportunity to improve public health and reduce pressure on healthcare services, enhance educational outcomes (especially for girls) and increase workforce productivity.

Inequities persist

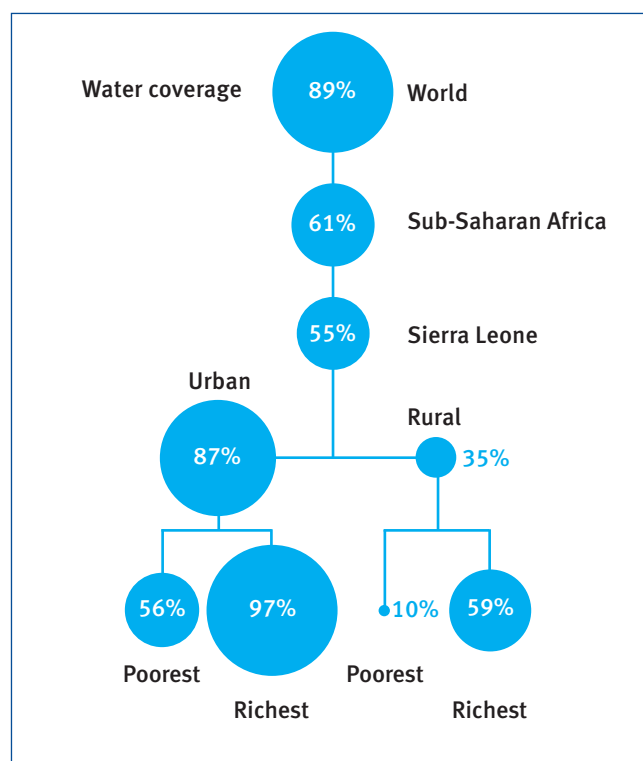
It is critical that the benefits of investment in water, sanitation and hygiene are experienced by all, particularly the poorest and most vulnerable people. Unfortunately, this has not been the reality to date. There is significant disparity between levels of access to improved water sources and improved sanitation facilities between rich and poor, and between urban and rural communities.

This is demonstrated in Figure 3 (right), which shows the extent to which access to drinking water varies by wealth quintiles, and between urban and rural areas, in Sierra Leone¹⁴. Nationally, 55% of people have access to an improved source of drinking water, just below the Sub-Saharan Africa average of 61%. However, while access for the wealthiest 20% of urban residents is almost universal, only one in ten of the poorest people living in rural areas has access. The rate of progress over the past two decades has also lagged for the poorest people. In South Asia, for example, the poorest 20% saw barely any improvement in their access to sanitation between 1995 and 2008¹⁵. Meanwhile, the richest 20% moved even closer to universal access, with the most dramatic gains seen by the second wealthiest 20%.

Furthermore, there is evidence that minority groups and those suffering discrimination (for example, on the basis of their caste, class,

religion or ethnicity) are frequently denied access to improved water and sanitation facilities. WaterAid's research in India revealed that scheduled caste children weren't allowed to drink from shared water sources at school¹⁶.

Fig 3 – Regional and country averages mask huge disparities



Source: JMP 2012 and Sierra Leone Demographic and Health Survey 2008

Slums: A huge challenge

The MDG on environmental sustainability included a target to significantly improve the lives of at least 100 million slum-dwellers by 2020. While progress has been made, rapid urbanisation means that interventions to improve basic services are being outpaced by the growth in demand, and gains for the world's current slum-dwellers may be rapidly undone.

People living in informal settlements and slums are particularly vulnerable to diseases caused by poor quality water and inadequate sanitation and hygiene. This is due to many factors, including poverty, crowding and political marginalisation¹⁷. Yet their obvious need is often neglected, as unrecognised tenure may discourage investment

by the tenant or landlord, or the desire to keep rent affordable may lead to resistance to improving services from tenants themselves. These issues are both causes and consequences of the difficulty slum dwellers experience in exercising political power. Meanwhile, national and municipal governments often fail to prioritise urban water and sanitation services, and do not recognise their obligation to improve service delivery to their communities, despite in most cases recognising water and sanitation as human rights¹⁸.

In Bangladesh, for example, around 31 million people live in urban areas. 35% of these people live in slums where there is no legal framework to ensure access to water and sanitation services. People who lack an official address or the legal right to own property or sign contracts have no legal right to a water connection, so only 5-10% of slum-dwellers in Dhaka have access to a legal water supply. Others must go to traders selling water from illegal connections at inflated prices, or use polluted water from lakes and streams to wash themselves and their dishes, and even for drinking and cooking¹⁹.

Aid does not respond to need

A central objective of the emerging 'global partnership for development' envisaged in 2000 as MDG8 was an increase in the level of financing committed to development by richer countries through their aid budgets. Aid levels have risen since 2000, but have levelled off in recent years. Only a few donor countries have met or are close to reaching the UN target of 0.7% of gross national income (GNI) spent on aid²⁰.

The water, sanitation and hygiene sector has fared less well than others – such as health, education and governance – in securing increased financing, with sanitation and hygiene particularly neglected. Aid to water, sanitation and hygiene has not yet been targeted most effectively at the poorest and most vulnerable communities, and the sector is dominated by a small number of large bilateral and multilateral agencies (see Figures 4 and 5 – below)²¹.

Fig 4 – Largest donors to water supply, 2010

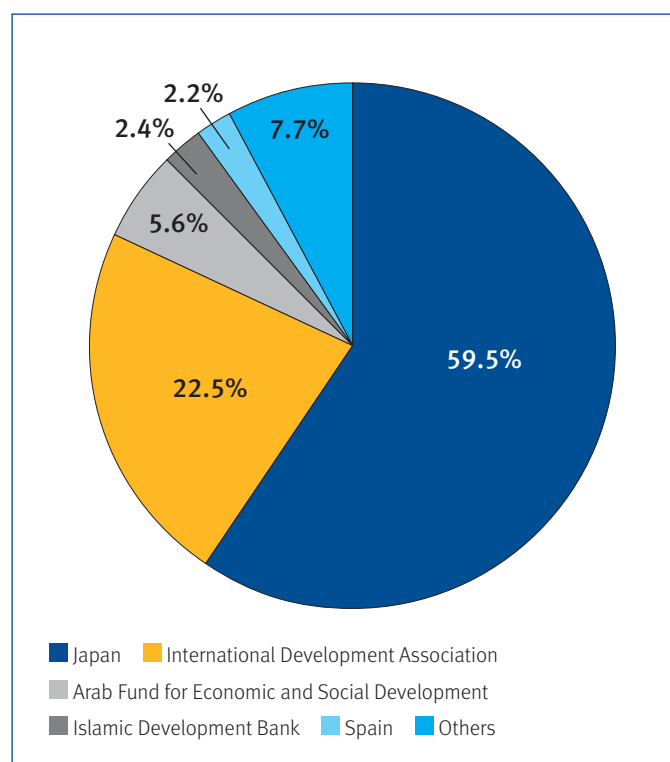
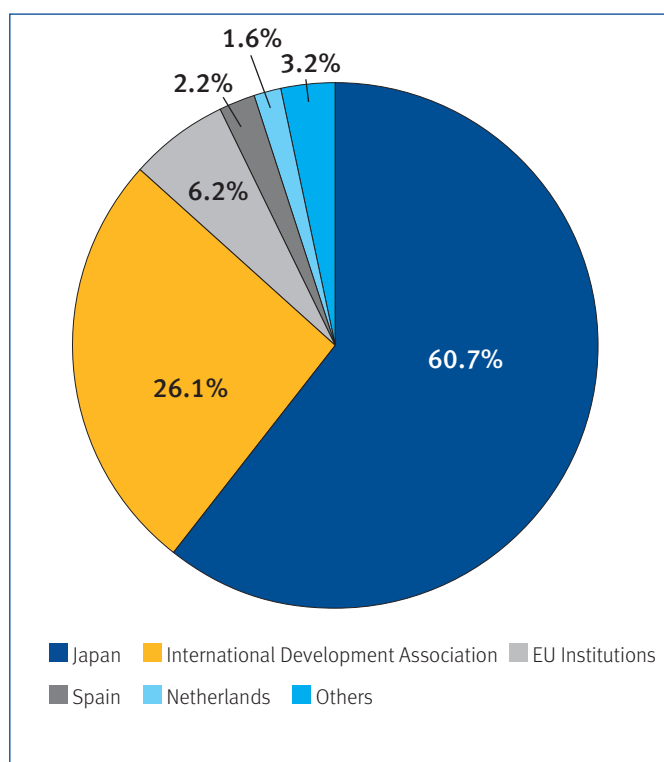


Fig 5 – Largest donors to sanitation, 2010



Source: Development Initiatives/WaterAid (2012)



An unsanitary hanging latrine over an open sewer that runs through Mollar slum, Dhaka, Bangladesh

We have to do better

The human right to water and sanitation is now widely recognised by UN Member States and implies increased attention to reducing inequalities in access to water, sanitation and hygiene²². Yet, many people have been excluded from recent improvements in access to water and

sanitation because they are poor – and this ongoing lack of access keeps them poor. Improving access in marginalised communities is therefore key to addressing both poverty and inequality, and to breaking the cycle of deprivation. This must be a central focus of future development efforts.

“With 2015 clearly on the horizon, the international community needs to start offering answers to some essential questions about its development priorities: Who has been excluded from access to water and sanitation? Why has this happened? And how can progress be more effectively measured in the coming decades in order to stop ignoring the most marginalised?”

Catarina de Albuquerque, UN Special Rapporteur on the human right to safe drinking water and sanitation, UN General Assembly, October 2012

Fig 6 – Much of the world remains off-track to meet the water and sanitation 2015 targets

Sub-Saharan Africa

Sanitation coverage in 2015

Predicted **31%**
MDG target **63%**



Water coverage in 2015

Predicted **64%**
MDG target **74.5%**



At current rates of progress, **348 million** people will still be without safe water and **667 million** people will lack sanitation in 2015

South Asia

Sanitation coverage in 2015

Predicted **45%**
MDG target **62%**



Water coverage in 2015

Predicted **94.5%**
MDG target **86%**



At current rates of progress, **100 million** people will still be without safe water and **almost a billion** will lack sanitation in 2015

Source (both): JMP 2012



A woman walking home with water she's collected from an unsafe source, Kewachora tea garden, Sylhet, Bangladesh

The challenge ahead

The international community must continue to focus on making progress towards the MDGs, with particular attention to areas that are lagging, such as sanitation. However, discussions to identify strategic priorities and define a new framework and set of goals to guide poverty reduction efforts beyond 2015 are already underway.

We therefore need to develop a shared understanding of the challenges ahead for development and for water, sanitation and hygiene. We must ascertain where and how the international community can best support national and local governments and communities to overcome these challenges, while simultaneously advancing progress in other areas.

A rapidly changing world

The world is still experiencing rapid population growth, particularly in regions where child mortality has been declining, many of which remain with limited access to water, sanitation and hygiene. By 2050, the world population is expected to reach more than nine billion people,

compared to just over seven billion today. Virtually all of this growth will be in developing countries, with Africa's population expected to at least double, from 1.1 billion today to around 2.3 billion in 2050²³. This will change the context in which stress on resources such as water, food and energy is addressed. It will also affect efforts to achieve universal goals relating to health, education and nutrition, all of which are dependent on access to safe drinking water, sanitation and hygiene.

The scale of urbanisation is equally significant. By 2050, the number of people living in urban areas is expected to reach 6.3 billion, meaning that the world's population will be 67% urban. Most of the growth will be in developing regions, with Asia absorbing 1.4 billion more people living in urban areas by 2050, and Africa 0.9 billion²⁴. This presents a significant challenge to those working to ensure access to basic services and legal protections – including supplying safe drinking water and managing, transporting and treating sewage and wastewater – particularly as much of this growth will be concentrated in informal settlements and slums.

“Public policies for water and sanitation provision are being outpaced by rapid urbanisation.”

UN Water (2011) *World Water Day 2011: Water and urbanisation*



A water drainage site, Kifumbira area, Kampala, Uganda

Climate change poses an additional challenge. Extreme weather-related events are likely to become more frequent and more intense, and changes in rainfall will affect the timing and availability of rainwater. The 783 million poor and marginalised people that rely on unsafe and vulnerable water sources²⁵ will be particularly affected as these sources are more exposed to

the effects of climate change²⁶. Improved water sources help protect poor people from the impacts of a variable climate by giving them more reliable access to water²⁷. However, increased effort is needed to ensure that existing service delivery arrangements are both resilient and sustainable.

WaterAid/GMB Akash/Panos



A boy walks home with water through a landscape made barren by salination after Cyclone Aila struck in 2009, Koyra, Bangladesh

Water resources under pressure

A number of countries already experience considerable water stress, as a result of insufficient and unreliable rainfall, changing rainfall patterns or flooding.

Demographic changes, changes in consumption patterns, and gross domestic product (GDP) growth add to existing stress by driving demand for water; from 1960-2000, global water withdrawals doubled in volume.

The added challenge of climate change will further increase pressure on water supply by altering existing patterns of availability²⁸.

These physical stresses are overlaid with economic and political scarcity. Around 1% of global water is freshwater, but a less-recognised statistic is that less than 10% is actually used, partly due to poor water resource management²⁹. Comparing water availability to water use shows that while there are some highly stressed countries, a significant proportion of countries use very little (less than 5%) of the water that is available to them³⁰.

Globally, 783 million people still lack safe water – not because the water isn't there, but because they cannot access it. A lack of investment results in an absence of supply infrastructure, such as handpumps. Where such infrastructure is in place, sustainability is often not addressed. For example, in 2007, an estimated 36% of handpumps in Sub-Saharan Africa were classed as 'non-functional' due to falling into disrepair³¹.

Capacity to respond and adapt

Progress on water, sanitation and hygiene is held back by acute pressure on public finances, particularly in the continuing aftermath of the 2008 economic crisis. This affects the level of financial support available from donors and multilateral agencies, and has a potential impact on financial resources, both public and private, within developing countries.

More positively, many developing countries are seeing their economies grow (in some cases very rapidly), demonstrating greater capacity and scope for innovation and investment. New donor countries are emerging, such as India, China and Brazil. Several countries considered low-income until recently are now classified as middle-income by the World Bank – Ghana, Zambia and Laos, for example³².

Several low-income countries, such as Uganda, Kenya and Bangladesh, are developing strong knowledge sectors, which are home to active and socially engaged entrepreneurs and technological innovators. There is good potential for local solutions to be found to both local and global challenges, including those related to water, sanitation and hygiene.



“‘Scarcity’ is as much a distributional issue of ‘fairness’ and access as it is of availability.”

Evans A (2011) *Resource scarcity, fair shares and development*

Why water, sanitation and hygiene matter

Safe water, adequate sanitation and good hygiene are basic needs and human rights. Progress in these areas underpins all sustainable development efforts. Communities that lack access to water consistently highlight it as a development priority³³. Any future development framework must reflect this reality and create incentives and accountability for progressive realisation of the human right to water and sanitation.

The lack of progress in improving access to sanitation in particular is acting as a brake on progress in economic and human development, particularly in areas such as health, nutrition and education. This was highlighted during the International Year of Sanitation in 2008, then at the MDG Review Summit in 2010, and again in *The Millennium Development Goals Report 2012*³⁴. Meanwhile, the people within these sectors are often failing to take the necessary steps within their areas of responsibility to ensure universal access to water, sanitation and hygiene.

Lessons from development programming in recent years indicate the need for a stronger focus on cross-sectoral integration and for different

stakeholders to work in partnership at community level. Effective, integrated programmes reflect the reality of people's lives and the significant inter-relationships between different development outcomes.

Health

Globally, between 1990 and 2012, the number of children dying before the age of five fell from more than 12 million to 6.9 million. However, despite progress on child mortality, infectious diseases such as pneumonia, and diarrhoea remain the top killers of children under five³⁵.

Increasing access to water, sanitation and hygiene can contribute significantly to improving health outcomes, and is particularly important to efforts aimed at reducing the burden of disease and malnutrition, as well as relieving pressure on the healthcare system as a whole. The UN estimated in 2006 that half of all hospital beds in developing countries were filled by people with illnesses caused by inadequate water, sanitation and hygiene³⁶.

Most cost-effective health intervention

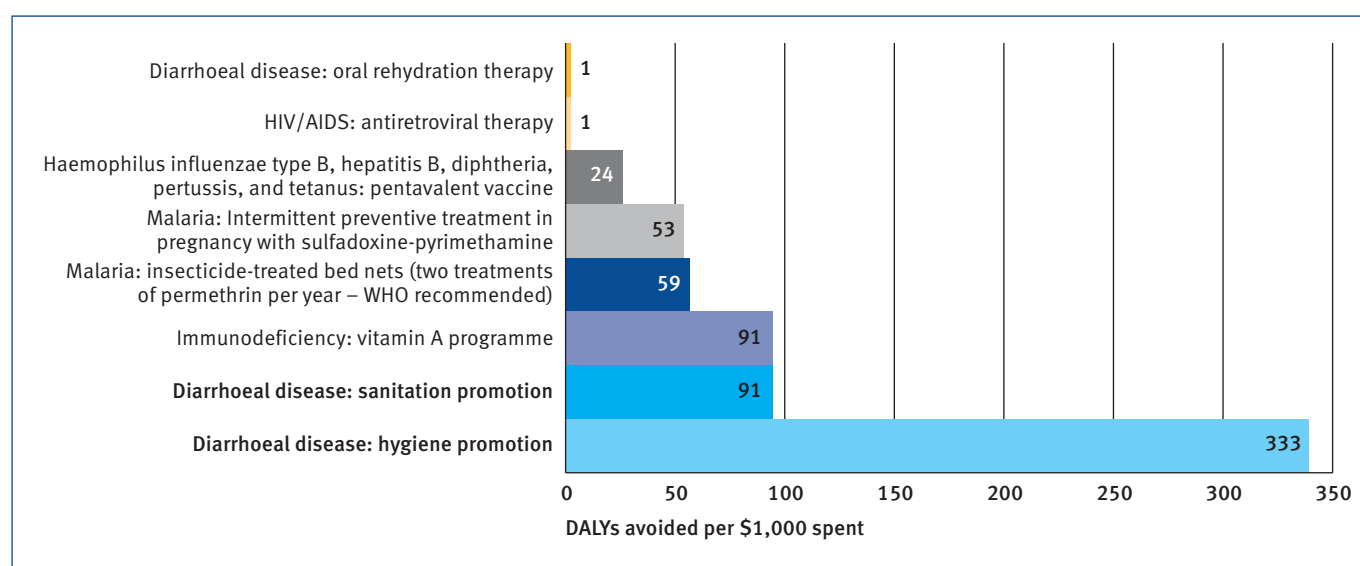
Promoting sanitation and hygiene is highly cost-effective, and can have even more impact when combined with other health interventions. A 2006

report showed that hygiene promotion could save an estimated 333 disability-adjusted life years (DALYs) for every \$1,000 spent, as Figure 7 shows.

“Providing sustainable access to improved drinking water sources is one of the most important things we can do to reduce disease.”

Dr Margaret Chan, WHO Director-General

Fig 7 – The cost-effectiveness of child survival interventions



Source: Adapted from World Bank (2006) *Disease control priorities in developing countries* (second edition)

Safe, effective healthcare for all

Improving access to safe water, sanitation and hygiene is particularly important in healthcare settings, and for those with chronic conditions. For example, access to clean water helps those taking regular medication, and those with weak immunity, who are more susceptible to infection. It is estimated that people living with HIV and AIDS need around five times more clean water than those who are not immuno-compromised³⁷. A study in Southern Africa found that providing home-based care for someone living with advanced AIDS can require up to 24 buckets of clean water a day³⁸. Safe drinking water is also

critical for maintaining the nutritional requirements for greatest efficacy of anti-retroviral therapy for people living with HIV and AIDS.

Access to water, sanitation and hygiene has a direct impact on the health of women and girls throughout their lives. The absence of adequate sanitation and menstrual hygiene facilities at school often lead to absenteeism or dropping-out. These basic facilities also reduce vulnerability to the risks involved with pregnancy and childbirth, through unhygienic home birth environments, unhygienic health facilities, and intestinal helminth infections and the associated anaemia that contribute to maternal mortality³⁹.

Healthy children

Diarrhoeal disease is the second biggest single killer of children under five. It accounts for 11% of all deaths in under-fives worldwide⁴⁰ – an estimated 760,000 deaths in 2011⁴¹. Water-related diseases – such as typhoid, cholera, leishmaniasis and schistosomiasis (bilharzia) – constitute a high proportion of the burden of disease in endemic regions in the developing world. Tackling diarrhoea requires the implementation of a package of life-saving interventions that includes vaccines, treatment, clean water, sanitation and hygiene, and nutrition.

These interventions are most effective when implemented in an integrated way, rather than in isolation. For example, the delivery of the vaccine against rotavirus, a major cause of severe diarrhoea, offers excellent opportunities for delivering behaviour change interventions, such as the promotion of handwashing with soap. Further opportunities are offered through programmes to control neglected tropical diseases, such as onchocerciasis, lymphatic filariasis and trachoma. Pneumonia, which is spread largely due to poor hygiene, accounts for 14% of all under-five mortality worldwide and is the biggest killer of children under-five globally.

“The water is dirty, brown, and we can see worms in it. This is why my son is sick... After it rains the water washes the faeces and this runs through the houses and even into the well, into the water we drink. My wish and aspiration for my family and the community is to have clean water.”

Yaya Dembelè, Niala Bagadaji, Mali

WaterAid/Layton Thompson



Yaya Dembelè and his son Ousmane who has been diagnosed with cholera, Niala Bagadaji, Mali

Better nutrition

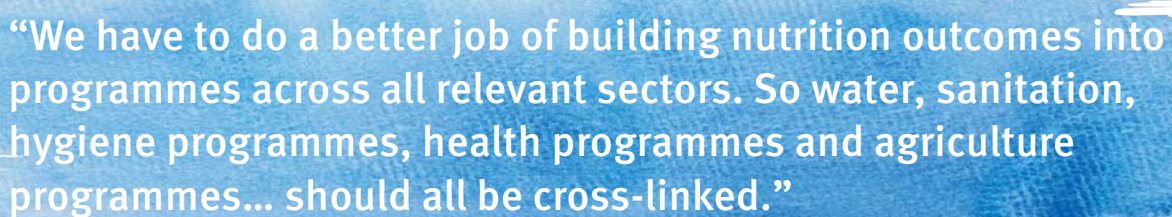
Approximately a third of all child deaths are attributable to nutrition-related factors, such as low birth weight, stunting (low height for age), and severe wasting, all of which are closely linked to a lack of access to water, and particularly sanitation and hygiene⁴². Although the proportion of children under age five that are underweight dropped from 29% in 1990 to 18% in 2010, the world remains off-track to meet the MDG target of halving hunger⁴³. Many children in developing regions suffer stunting, which reflects chronic nutritional deficiencies, repeated ingestion of animal and human faeces due to poor waste management, and lack of sanitation⁴⁴. According to the World Bank, open defecation accounts for most or all excess child stunting in India⁴⁵.

Children who suffer repeated or persistent bouts of diarrhoea or intestinal worms lose vital nutrients and can easily become malnourished. The converse is also true – children who are malnourished are more susceptible to infection through poor quality drinking water or inadequate sanitation and hygiene. The World Health Organisation estimates that 50% of malnutrition is associated with repeated diarrhoea or intestinal nematode infections, as a result of unsafe water, inadequate sanitation or insufficient hygiene. Improvements in water and sanitation services and hygiene

behaviours are essential to break this vicious cycle. With improved sanitation and a secure, safe water supply, communities are not only better able to avoid illness; they can also invest the time that would have been spent fetching water in growing nutritious food, such as fruit, vegetables and pulses, particularly when supported by integrated water resource management to ensure the best use of water and a conservation approach. This improves household food security and can provide additional income if produce is taken to market.

Healthier places to live

Enhancing sanitation, waste management and environmental health more broadly can also reduce the number of sites where disease vectors can breed. Where sanitation is poor, human faeces attract flies – such as those that transmit trachoma – which find faeces a perfect place to lay their eggs. Stagnant water also provides the ideal breeding site for mosquitoes, which transmit malaria, dengue, yellow fever and West Nile virus. As climate change has an impact on traditional sites of standing water, these disease vectors are predicted to be able to survive in new places, requiring new and innovative approaches to manage water and prevent the spread of disease.



“We have to do a better job of building nutrition outcomes into programmes across all relevant sectors. So water, sanitation, hygiene programmes, health programmes and agriculture programmes... should all be cross-linked.”

Dr Rajiv Shah, Administrator, US Agency for International Development, 29 June 2010, at Statesmen’s Forum, Centre for Strategic and International Studies, Washington, DC

Education

Significant progress has been made worldwide in improving primary school enrolment and completion, and secondary school enrolment is also on an upward trend. This is true even for countries facing school-age population growth and other challenges, such as those in Sub-Saharan Africa, which saw an increase in primary school enrolment from 58% to 76% between 1999 and 2010⁴⁶. The focus is now shifting to improving the quality of teaching and the overall learning environment, to help children stay in school and achieve good educational outcomes, and to the transition to secondary school for all children. Improvements in water, sanitation and hygiene within schools are a vital part of this effort.

Better school facilities

Recent data from least-developed and low-income countries shows that, in 2011, only 51% of schools had an adequate water source and only 45% had adequate sanitation facilities⁴⁷.

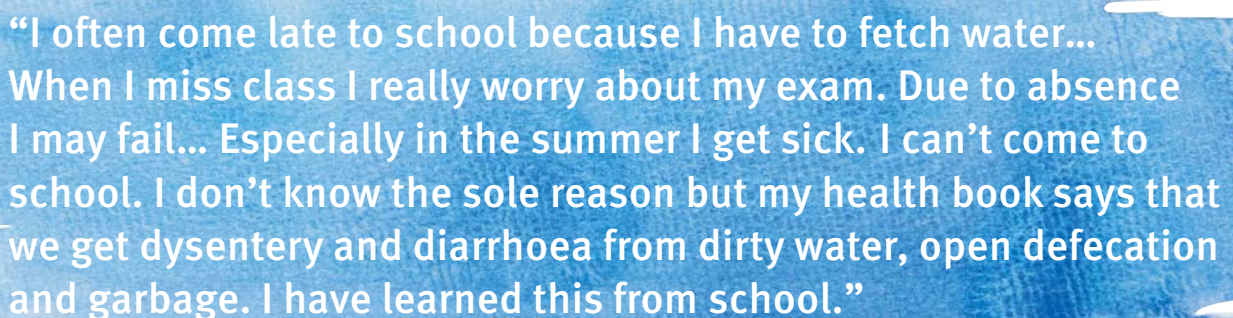
Improving water, sanitation and hygiene in schools plays an important role in reducing absence due to illness and keeping children in education throughout their primary and secondary school years. This can provide trans-generational

benefits, since educated mothers generally have more control over their fertility and are more likely to send their own children to school.

Improved facilities also provide a better working environment for teachers and other staff, aiding job satisfaction, retention and productivity. Adequate school sanitation facilities are particularly important for older girls and female staff, who need to manage their menstrual hygiene, and can be a factor in preventing secondary school pupils from being absent. Key factors are whether toilets are safe and clean, and have good levels of privacy, separate areas for boys and girls, and reliable handwashing facilities.

These factors are critical not only for the acceptability of toilets, but also for safeguarding against bullying, sexual harassment and violence, which can all occur at toilets that are not sex-segregated or do not provide appropriate levels of privacy and security.

There is evidence to suggest that the provision of safe drinking water and adequate sanitation and hygiene facilities in schools helps to limit absenteeism, and reduces levels of illness among schoolchildren⁴⁸.



“I often come late to school because I have to fetch water... When I miss class I really worry about my exam. Due to absence I may fail... Especially in the summer I get sick. I can’t come to school. I don’t know the sole reason but my health book says that we get dysentery and diarrhoea from dirty water, open defecation and garbage. I have learned this from school.”

Ganga, 14, Sindhuli district, Nepal



Ganga, 14, in class at Shree Heera Thumlee Secondary School, Tosramkhola VDC, Sindhuli district, Nepal

Good hygiene behaviour

Schools can play a vital role in educating children, families and communities about water, sanitation and hygiene. Habits developed by children at school can have lifelong benefits for them as individuals and for their families.

In the Philippines, an initiative to reduce childhood diarrhoea and other illness introduced supervised tooth-brushing and handwashing with soap in schools, alongside deworming⁴⁹. Within a year, participants in the programme saw school absenteeism drop by 30%. The numbers of

underweight children and those with oral infections were also significantly lower than in non-participating schools⁵⁰. The education ministry and local NGO, Fit For School, are now rolling out the initiative nationwide, with support from international partners⁵¹.

Children can also be agents of change within their schools, families and communities. In Uzbekistan, for example, children are leading a hygiene promotion initiative that complements efforts to improve access to safe water supplies in remote and disadvantaged communities⁵².

“We wash our hands to remove cholera.”

Mishek, 7, Chiobola School, Nyimba ward, Zambia



WaterAid/Anna Kari

Boys washing their hands at Chiobola School, Nyimba ward, Zambia



Ukhamaya Sarki collecting water with her ten month old baby, Mangali, Sindhuli district, Nepal

“It’s a 30 minute journey to get water; in the dry season we have to go further and it takes 40 minutes. It takes longer going back as it’s uphill... Don’t even talk to me about queuing. I have to queue for two or three hours in the morning sometimes, because every household needs water.”

Ukhamaya Sarki, Mangali, Sindhuli district, Nepal

Gender equality

Gender inequality persists worldwide, and women continue to face discrimination in access to healthcare, education, work, and assets such as land. Women and girls often struggle to participate in decision-making, at community level and nationally. Violence against women and girls continues to undermine efforts to reach all development goals. Gender inequalities are manifested in unequal levels of access to water and sanitation, and the disproportionate impact of poor access on women and girls.

Increased productivity for women

Women continue to bear the greatest burden of water collection. Even those with access may have a water source many hours’ walk away. 25 Sub-Saharan African countries indicated that around 71% of the water collected is done so by women and girls. In these countries alone, it is estimated that women spend a combined total of at least 16 million hours every day collecting water. Only 25% of people in these countries had access to water at or near their home in 2010⁵³. Securing access to water for the other 75% of households would dramatically improve the lives of affected women – as well as children and men – by enhancing their productivity, health and wellbeing.

“The lack of sanitation facilities in Kibera affects women more than men... Women tell us regularly how they are at risk of being raped or assaulted after dark or at night if they were to attempt to walk even 100 metres to a latrine near their houses.”

Amnesty International official, Kibera, Nairobi, Kenya⁵⁴

In many communities, women manage kitchen gardens and other forms of homestead agriculture. Improving the security and proximity of their water supply, and combining this with advice and support on issues such as effective irrigation and crop management, can therefore yield real benefits for women’s productivity, status and empowerment. In Senegal, for example, it has been estimated that half of women’s incomes derive from productive water use, through activities such as gardening and raising livestock⁵⁵.

Reduced vulnerability

Women’s vulnerability can also be reduced by bringing improved water sources and sanitation facilities closer to communities, and ensuring their sustainability and reliability. Where access is poor, women and children can also face violence and other threats while fetching water, washing, or finding somewhere to urinate or defecate. At greatest risk are the 526 million women worldwide who have no choice but to go to the toilet in the open⁵⁶, although public or shared latrines can also present safety issues for women, particularly after dark.

Improved status and dignity

Improved sanitation brings further benefits to women and girls, improving their status, as well as their health and wellbeing. In addition to being safer and more secure, well-designed toilets with handwashing facilities assist with menstrual hygiene management. This can help women and girls maintain good reproductive health, and to gradually free themselves from the taboos, restrictive rituals and customs regarding what they can and can’t do while menstruating.

In Afghanistan, as in many countries, women and girls who are menstruating are considered ‘unclean’. Many face restrictions related to diet, washing, or cutting their hair or nails. The Afghan Government, supported by UNICEF, has developed information booklets that address popular myths and try to improve understanding of menstruation and related sanitation and hygiene issues⁵⁷.

“It has become more dangerous to be a woman fetching water or collecting firewood than a fighter on the frontline.”

Margot Wallström, UN Special Representative on Sexual Violence in Conflict

Environmental sustainability

Freshwater ecosystems provide water for many different uses – from essential daily needs to cultural, spiritual, recreational and aesthetic purposes. These different values shape the way that we talk about water and frame the policy issues. Water also plays an essential role in other ecosystems necessary for sustaining life. Efforts to improve water, food and energy security, and environmental sustainability, are increasingly recognised as being interdependent.

Resilient communities

People living in marginal environments often depend on rainfall for their lives – whether it is for drinking water, washing or sustaining livestock. This leaves them vulnerable to extreme weather events like floods or droughts. Providing secure and reliable sources of water for drinking and other basic needs can significantly enhance the ability of vulnerable groups to cope with and adapt to livelihood shocks.

For those displaced by conflict or natural disasters, access to basic services such as safe

drinking water and sanitation can be among the first things lost. Ensuring these are available can help to provide security, especially in camp settings, where research shows that sexual violence most often occurs when women must leave secure camp boundaries in search of firewood or water⁵⁸.

Sustainable cities

Reaching people in cities with improved access to safe water, sanitation and hygiene will continue to pose a significant challenge, as more people move into urban and peri-urban areas in developing countries, and with slums and informal settlements likely to expand.

Creativity and innovation will be needed, as well as sharing and replicating good practice within and between cities and countries, as the C40 cities network has done in relation to climate change⁵⁹. Another example is the African Water and Sanitation Local Authorities Network's plan to provide a platform for local governments to share knowledge and experience about how best to ensure sustainable, resilient and equitable urban water and sanitation in African cities⁶⁰.

“I have lost my livestock. I am empty. Everything is finished. I lost 30 goats and sheep. I had ten cattle. But I lost all of them.”

Middle-aged man speaking about the impact of drought, Meeto, Ethiopia⁶¹

WaterAid/Kate Holt

Delia tends the garden in Bokola village, Malawi





Local artisans for the Self-Supply project in Itemba ward, at a finished well, Mambwe village, Itemba ward, Luapula province, Zambia

Growth and employment

Water is an essential resource underpinning activity in all economic sectors, ranging from agriculture and industry, through to energy, tourism and transportation. Effective water resource management is therefore fundamental to stimulating economic growth and productivity, and to providing ongoing employment opportunities.

If the MDG targets on water and sanitation were met, the total economic benefit would be \$60 billion annually – of which, \$54 billion can be attributed to improved sanitation⁶². Attaining universal access to sanitation would significantly enhance the benefits, yielding \$220 billion a year if starting from the existing level of coverage⁶³. For some African and Latin American countries, achieving universal access to both water and sanitation could yield gains equivalent to more than 15% of GDP⁶⁴.

Improved productivity

Improving access to water, sanitation and hygiene also benefits the economy by helping people stay healthy and resilient enough to work productively, whether they are working in their households and communities, studying, or in paid employment.

The costs as well as potential benefits are greatest for reaching the poorest people. It has been estimated that meeting the MDG targets on water and sanitation would save 3.2 billion adult working days annually, and 443 million school days, which would ultimately increase productivity and earning potential by improving education⁶⁵.

WHO estimates, as a bare minimum, that for every \$1 invested in improving water and sanitation, an average of more than \$4 is returned economically, much of which relates to the productive time saved by increasing the proximity of water and sanitation services to the people who use them⁶⁶.

Reduced economic risk

The total global economic losses due to inadequate water supply and sanitation services have been estimated at \$260 billion a year. Effective water resource and waste management reduces the risks faced by critical economic sectors – including industry, agriculture and tourism – and offers reassurance to businesses as they make investment decisions. It can also have a positive impact on other economic indicators, such as property prices⁶⁷. Improvements in access to water, sanitation and hygiene contribute to growth and prosperity in the domestic private sector, and also help attract direct investment from external sources, which in turn boosts GDP and can reduce poverty.

Investment in water, sanitation and hygiene can reduce the costs to health services, businesses and society arising from disease outbreaks. For example, the 1991 outbreak of cholera in Peru was estimated to cost the country as much as \$1 billion in lost tourism and food trade embargoes alone⁶⁸. A recent modelling of cholera epidemics in Bangladesh and Mozambique calculated the total economic cost of an outbreak to be 2% of GDP⁶⁹.

The central importance of water, sanitation and hygiene

The table below summarises the impact that investing in water, sanitation and hygiene has on different sectors

Health	Education	Gender equality
<ul style="list-style-type: none">• Reducing childhood illness and death due to diarrhoeal and other water-related diseases• Reducing the burden of water, sanitation and hygiene-related illness on healthcare systems• Improving food security and nutrition• Reducing malnutrition and hunger, mitigating stunting and chronic wasting• Reducing exposure to disease• Maintaining the wellbeing of those with chronic illness	<ul style="list-style-type: none">• Improving educational outcomes• Keeping girls in school, especially post-puberty• Reducing school absenteeism due to illness• Enabling increased educational access and attainment, increasing lifelong earning potential• Improving working conditions for teachers	<ul style="list-style-type: none">• Saving women and girls time by reducing hours spent fetching water, improving productivity• Expanding livelihood options for women• Reducing women and girls' vulnerability, including to physical and sexual violence• Improving menstrual hygiene, with benefits to women and girls' reproductive health, dignity, status and self-esteem

Water and hygiene to development

Water and hygiene can have on other development outcomes:

Environmental sustainability	Growth and employment
<ul style="list-style-type: none">• Improving environmental health in slums and informal settlements• Helping make cities more sustainable• Reducing contamination of freshwater sources• Protecting freshwater and marine ecosystems• Strengthening water resource management• Helping communities to become more resilient, particularly to climate change	<ul style="list-style-type: none">• Improving productivity at individual, household, community and national workforce levels• Reducing risks and costs to key economic sectors, helping to attract investment• Underpinning activity in sectors that depend directly on water, eg energy, transportation• Helping people stay healthy enough to work• Bringing services closer to people, saving them time



Water, sanitation and hygiene in the post-2015 framework for development

A key strength of the MDG framework has been the provision of a coherent, measurable, time-bound and comprehensive agenda that has established norms and standards for international development cooperation.

The post-2015 framework must continue the best aspects of the MDG framework, while applying lessons learned from its weaknesses and implementation challenges. Communities,

governments, companies, civil society, international NGOs and other stakeholders need a shared, ambitious and achievable vision for poverty reduction and sustainable development once the MDG project comes to an end. This should reflect the importance of water, sanitation and hygiene to the attainment of poverty eradication, increased equality, and sustainable human and economic development.

“We cannot stop here. Our next step must be to target the most difficult to reach, the poorest and the most disadvantaged people across the world. The United Nations General Assembly has recognised drinking water and sanitation as human rights. That means we must ensure that every person has access.”

Ban Ki-Moon, UN Secretary General

A strengthened framework for achieving poverty eradication

A recognised weakness of the MDG framework is that the separation of targets by the various thematic goals discouraged effective collaboration across sectors, limiting progress significantly.

The post-2015 development framework needs to better reflect the complex nature of people's lived experiences, recognising the central importance of water, sanitation and hygiene to health, education, gender equality, economic growth and environmental sustainability – to strengthen the efficiency of interventions and to deliver sustainable human development outcomes. Broad outcomes-based goals must be established, and their targets and associated indicators must reflect the full range of interventions and human rights required to meet each outcome, so that integrated and holistic approaches are institutionalised.

The post-2015 framework should not only set goals, targets and indicators, but also set out how these will be measured and monitored. An implementation strategy should be agreed, reflecting the collective lessons learned from efforts to meet the MDG targets, and providing enough flexibility to be adapted by each country for its own needs, contexts and priorities. This should include estimates of the resources required to reach the post-2015 development goals from domestic and international sources.

The post-2015 framework must prioritise reaching people who have been marginalised from progress to date. For example, it may be most effective to take an integrated, cross-sectoral approach towards addressing the needs of specific groups of people – such as the rural poor, slum-dwellers or people with disabilities. A monitoring framework must require that all United Nations Member States are accountable for a focus on equity, so that no one is left behind.

WaterAid/Rindra Ramasomanana



School children wash their hands with clean water in the new hand basins, Soavina, Betafo district, Madagascar

A common vision of universal access to water, sanitation and hygiene by 2030

WaterAid's vision is of a world where everyone has access to water, sanitation and hygiene. For the first time, this longstanding goal of universal access is now within reach.

Few interventions would have a greater impact on the lives of the world's poorest and most marginalised people, particularly women and girls, than reducing the time spent collecting water and addressing the health problems caused by poor sanitation and hygiene. There is a growing consensus among sector professionals that universal access to water, sanitation and hygiene should have a central place within the post-2015 framework. This was reflected in the vision and summary targets presented by the WHO and UNICEF Joint Monitoring Programme (JMP)⁷⁰ expert working groups in The Hague in December 2012:

Vision: Safe and sustainable sanitation, hygiene and drinking water used by all.

Summary targets

- 1 Everyone has water, sanitation and hygiene at home.
- 2 All schools and health centres have water, sanitation and hygiene.
- 3 Water, sanitation and hygiene are equitable and sustainable.

WaterAid supports the JMP process and has engaged closely with it. The emerging vision and summary targets are comprehensive and balanced; however, the work to develop detailed targets and indicators is ongoing, and it is vital that these are bold and ambitious.



Manu Nayek outside his adapted latrine, Burjan tea garden, Sylhet, Bangladesh

WaterAid believes that the post-2015 framework for development should:

1 Identify targets for universal access to water, sanitation and hygiene by 2030

The post-2015 framework must set an ambitious target date for achieving universal access to water and sanitation services. Goal or outcome indicators should be added for both safe drinking water and sanitation, calling for universal access to each by 2030. Clear targets for hygiene practices should be added to the new framework. These targets should reflect the need for people to access drinking water, sanitation and hygiene at the household level, and also in schools, health facilities and workplaces. Alongside specific targets for water, sanitation and hygiene, these interventions should be recognised as critical to the achievement of health, equity and education outcomes, and should be embedded in relevant targets in those areas.

2 Address inequalities in water, sanitation and hygiene access

Water, sanitation and hygiene targets and indicators within the post-2015 framework should focus explicitly on reducing inequalities by targeting poor and disadvantaged groups as a first priority. These targets and indicators should also explicitly reflect the major barriers to access and forms of discrimination faced by poor people, women and girls, older people and disabled people. There is a particularly urgent need to recognise and address the significant time spent, usually by women and girls, collecting water and finding somewhere safe to defecate.

3 Embed human rights in water, sanitation and hygiene provision

Universal access to basic water and sanitation services are fundamental human rights that should be acknowledged within the post-2015 framework. Water, sanitation and hygiene outcome targets and their associated indicators should reflect the key principles and obligations derived from existing treaties relating to human rights.

4 Ensure sustainability of water, sanitation and hygiene services

Sustainability should be fully embedded within new water, sanitation and hygiene targets and indicators, in order to ensure lasting benefits over time. Targets and indicators should also reflect the need to measure quality alongside access. For example, the current MDG drinking water target refers to sustainable access to safe drinking water, but the MDG indicator – ‘use of an improved drinking water source’ – does not include a measurement of either drinking water safety or sustainable access. This means that accurate estimates of the proportion of the global population with sustainable access to safe drinking water are likely to be significantly lower than estimates of those reportedly using improved water sources⁷¹. The post-2015 framework must address this.

5 Take a holistic approach to poverty eradication and sustainable development that recognises the central importance of water, sanitation and hygiene

The critical linkages between health, education, gender equality, economic and environmental interventions and outcomes should be reflected in the post-2015 framework. Water, sanitation and hygiene targets must be reflected wherever they are required for a given goal or objective to be successful. This will strengthen the efficiency of development interventions and help build sustainable outcomes. The new framework should also seek to minimise water-related risks and build the resilience of societies and economies by protecting them from shocks (principally floods and droughts) and the added pressures of climate change. This includes protecting ecosystem services and using water within resource thresholds.

6 Promote accountability for progress on water, sanitation and hygiene

The integrated nature of sustainable development requires a more holistic approach to monitoring performance and ensuring accountability. The framework should reflect the fact that many of the poorest people live in middle-income countries and should therefore ensure relevant and meaningful targets for all countries, not only the least developed. New architecture is required to measure and track global progress effectively, and to identify blockages so that they can be addressed.

WaterAid recommends that specific sections of the post-2015 development framework relating to water, sanitation and hygiene should:

- Include a goal on universal access to basic water and sanitation services as a fundamental human right.
- Specify a target date of 2030 for achieving universal access to safe water, sanitation and hygiene globally in households, schools and health facilities.
- Ensure that water, sanitation and hygiene targets and indicators focus explicitly on reducing inequalities, by targeting poor and disadvantaged people as a priority, and on improving the sustainability of services to secure lasting benefits.



Endnotes

- ¹ The Millennium Development Goals include: MDG 1: Eradicate extreme poverty and hunger; MDG 2: Achieve universal primary education; MDG 3: Promote gender equality and empower women; MDG 4: Reduce child mortality; MDG 5: Improve maternal health; MDG 6: Combat HIV/AIDS, malaria and other diseases; MDG 7: Ensure environmental sustainability; MDG 8: Develop a global partnership for development.
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- ³ Improved water is defined as piped water into a dwelling or yard/plot, a public tap or standpipe, a tubewell or borehole, a protected dug well, a protected spring, or harvested rainwater. More information is available at: www.wssinfo.org/definitions-methods/watsan-categories
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- ¹⁵ World Health Organisation/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (2012) *Progress on drinking water and sanitation: 2012 update*, p30
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- ²¹ Development Initiatives/WaterAid (2012) *Addressing the shortfall: The urgent need for increased and better targeted aid to the water and sanitation sector*
- ²² See, for example, Catarina de Albuquerque, UN Special Rapporteur on the human right to safe drinking water and sanitation, Report to the UN General Assembly, October 2012. Available at: www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=12853&LangID=E
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Nadia at the rehabilitated borehole, Nyamigende village, Juru sector, Bugesera district, Rwanda

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WaterAid's mission is to transform lives by improving access to safe water, hygiene and sanitation in the world's poorest communities. We work with partners and influence decision-makers to maximise our impact.

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